

Work Order ID 128524

128524

Page 1

Friday, January 16, 2015 2:51:12 PM

Item ID: D3608-1 Accept *N900040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Lower Doubler
Start Date: 1/16/15 Start Qty: 2.00 *2* Cust Item ID:
Required Date: 1/16/15 Req'd Qty: 2.00 *2* Customer:
Reference:

Approvals: Process Plan: MLJ Date: 15-01-20 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3608	C								

100 FLOW WATER JET 0.00
100
Waterjet Memo 0.00
FLOW CNC Waterjet 1-Cut as per Dwg D3608
Dwg Rev: C
Prog Rev: C
2-Deburr if necessary
② _____ DC 15/01/25

110 QC2- Inspect parts off machine FAI/FAIB 0.00
110
QC Memo 0.00
Quality Control
② _____ DC 15/01/25

120 QC8- Inspect parts - second check 0.00
120
QC Memo 0.00
Quality Control
② _____
DAG
38
9-89
JAN 26 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Page 2

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Required Date: 1/16/15 Req'd Qty: 2.00 *2* Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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150	Identify as per dwg & Stock Location: <i>Stop SOS</i>	0.00							
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150

Packaging	Memo	0.00							
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Packaging

DAS
06
1-09

JAN 28 2015

160	QC21 - Final Inspection - Work Order Release	0.00							
-----	--	------	--	--	--	--	--	--	--

160

QC	Memo	0.00							
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Quality Control

15/1/29
15.1-8

DQA: _____ Date: _____



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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
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Offset/Setup									
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Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other _____ _____ _____ _____
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Picklist Print

Friday, January 16, 2015 2:51:12 PM

Page 1

Work Order ID: 128524

128524

Parent Item: D3608-1

D3608-1

Parent Item Name: Lower Doubler

Start Date: 1/16/15

Required Date: 1/16/15

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A New Issue 07-03-26 JLM
IPP Rev:B 08-10-15 preliminary issue DD verified by:EC
IPP Rev:C 08-12-11 rev.A as per dwg DD verified by:EC IPP
Rev:D 10.02.16 rev.B as per dwg DD verified by:EC IPP Rev:E
10.11.17 as per PC1 dwg DD verified by:EC IPP Rev:F 10.11.29 as
per revC dwg DD verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S20GA		Purchased		No		100	sf	235.7639	0.7392	2			

M304S20GA

304/316 .040 Sheet

22 15/01/25

Location

Loc Qty

Loc Code

MAT020

235.7639

m130345

3.7639

m131060

232

2.25

DQA: _____ Date: _____



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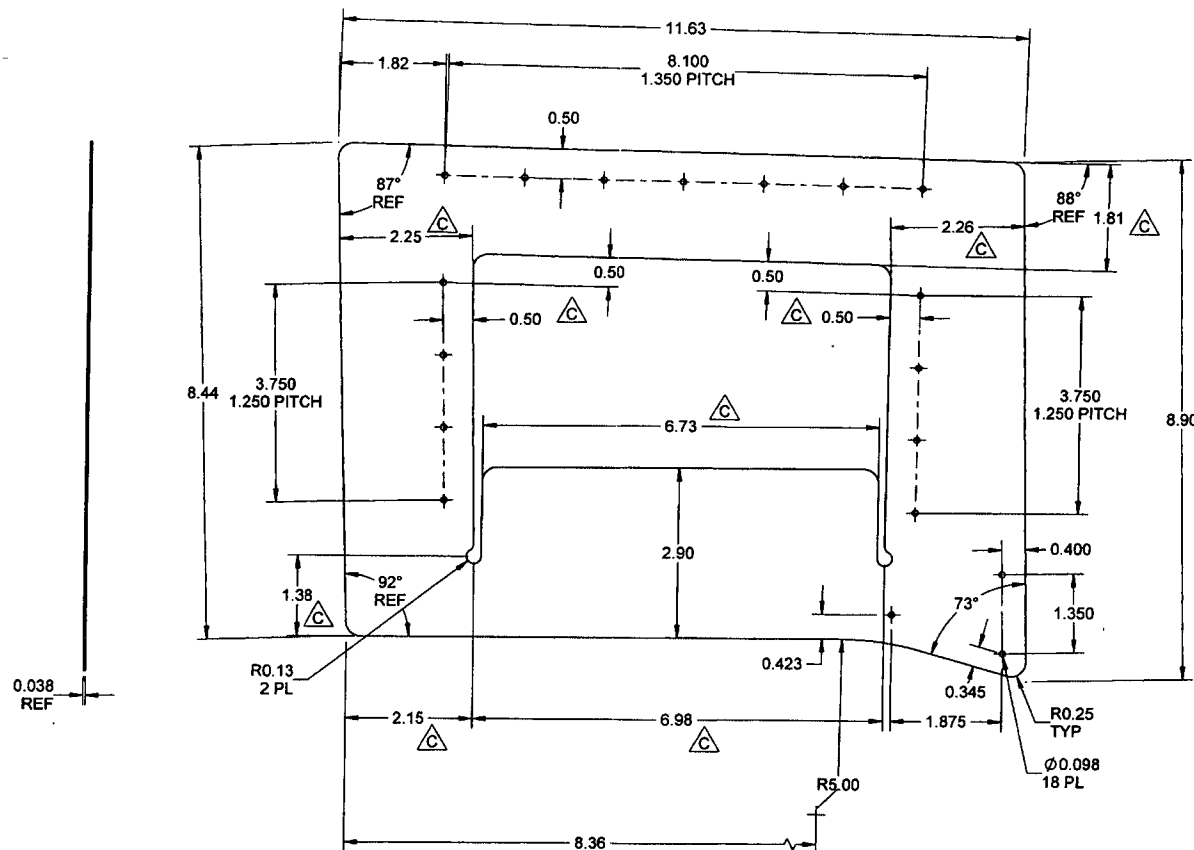
DART AEROSPACE LTD		Work Order:	128524
Description: Lower Doubler		Part Number:	D3608-1
Inspection Dwg: D3608 Rev: C		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.098	+0.004/-0.001	Ø.097	/			
1.82	+/-0.030	1.82	/			
0.50	+/-0.030	.503	/			
11.63	+/-0.030	11.63	/			
81.00	+/-0.030	8.102	/			
1.350	+/-0.010	1.351	/			
2.25	+/-0.030	2.243	/			
1.81	+/-0.030	1.819	/			
3.750	+/-0.010	3.751	/			
1.250	+/-0.010	1.252	/			
8.90	+/-0.030	8.90	/			
0.400	+/-0.010	.404	/			
4.350	+/-0.010	—	—			
0.345	+/-0.010	.343	/			
1.875	+/-0.010	1.875	/			
6.73	+/-0.030	6.733	/			
2.90	+/-0.030	2.905	/			
6.98	+/-0.030	6.98	/			
1.38	+/-0.030	1.38	/			
8.44	+/-0.030	8.435	/			
0.040	+/-0.010	.035	/			

Measured by:	<i>DM</i>	Audited by:	38	Preliminary Approval:	
Date:	15/01/28	Date:	JAN 26 2015	Date:	

Rev	Date	Change	Revised by	Approved
A	09.05.11	New Issue	KJ	
B	10.02.18	Dimensions updated per Dwg Rev B	KJ	
C	10.12.21	Dimensions updated per Dwg Rev C	KJ	<i>[Signature]</i>



COPY
 RETURN TO
 ENGINEER
 CONTROL COPY
 SUBJECT TO
 WITHOUT
 FOR
 128524 MLJ
 1501-20

RELEASED
 2010-11-23

D3608-1 LOWER DOUBLER

- NOTES:**
- 1) MATERIAL: AISI 304/316 SS SHEET, 20 GAUGE
PER MIL-S-5059, OR AMS 5513 (304) OR AMS 5524 (316)
OR ASTM A240 OR ASTM SA240
REF DART SPEC M304S20GA
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
 - 7) WEIGHT: 0.76 lbs

C	OFFSET TOP AND VERTICAL EDGES OF RECTANGULAR OPENING BY 0.250 OUTWARDS; UPDATE IDENTIFICATION REFERENCE	MB	10.11.19
B	OFFSET TOP AND VERTICAL EDGES OF RECTANGULAR OPENING BY 0.250 INWARDS; ELIMINATE D3608-1FA-3F; DELETED BENDING DETAILS. REASON: D3608-1/3 NOW SOLD TO CUSTOMERS UNBENT PER PAR#09-097	MB	10.02.05
A	NEW ISSUE	MB	07.04.11
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.11.19		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D3608	REV. C
TITLE DOUBLER	SHEET 1 OF 2
	SCALE NTS

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8 7 6 5 4 3 2 1

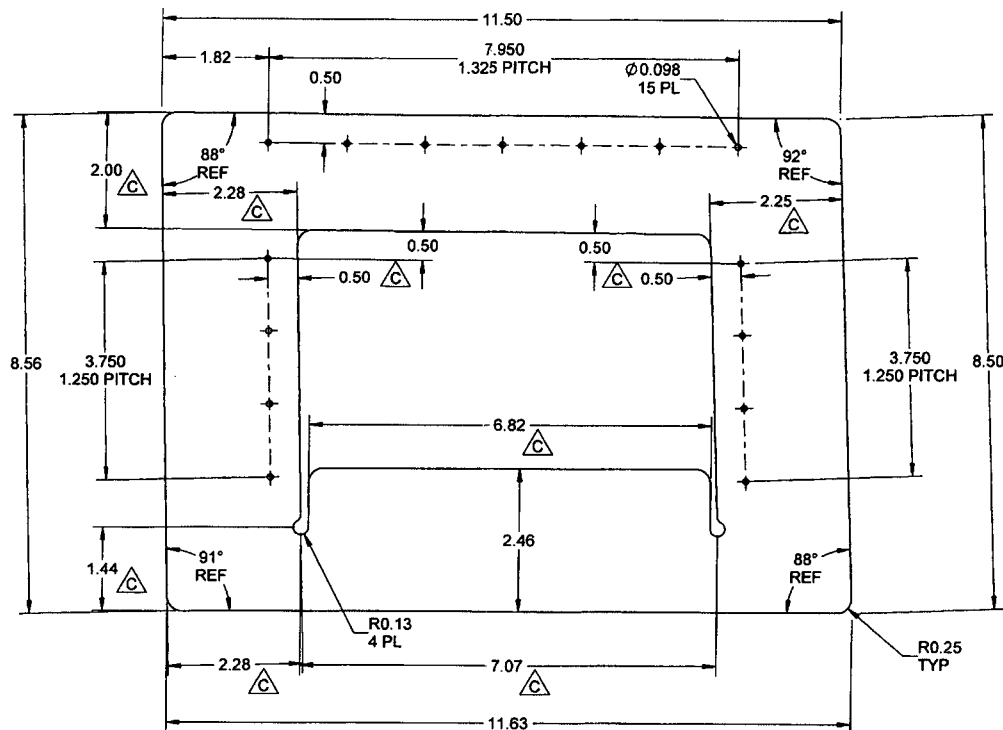
D

C

B

A

0.038
REF



D3608-3 UPPER DOUBLER

NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET, 20 GAUGE
PER MIL-S-5059, OR AMS 5513 (304) OR AMS 5524 (316)
OR ASTM A240 OR ASTM SA240
REF DART SPEC M304S20GA
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.75 lbs

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3608	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		DOUBLER	NTS
DATE	10.11.19	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
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2010-11-23
AM

8 7 6 5 4 3 2 1